## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 2 June 2005 (02.06.2005)

## (10) International Publication Number WO 2005/049512 A1

(51) International Patent Classification7:

C03B 17/04,

(21) International Application Number:

PCT/EP2004/012285

(22) International Filing Date: 29 October 2004 (29.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03025007.0

30 October 2003 (30.10.2003) EP

(71) Applicant (for all designated States except US): UMI-CORE AG & CO. KG [DE/DE]; Rodenbacher Chaussee 4, 63457 Hanau-Wolfgang (DE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SINGER, Rudolf [DE/DE]; Am Sportfeld 1, 55270 Engelstadt (DE).

(74) Agent: VOSSIUS & PARTNER; Siebertstrasse 4, 81675 Munich (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

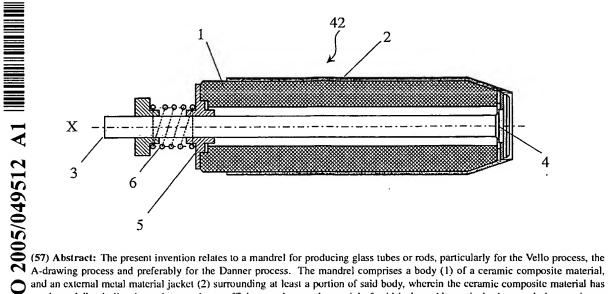
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DANNER PIPE



and an external metal material jacket (2) surrounding at least a portion of said body, wherein the ceramic composite material has a substantially similar thermal expansion coefficient as the metal material of said jacket. Alternatively the mandrel comprises a self-supporting metal material jacket (22).

